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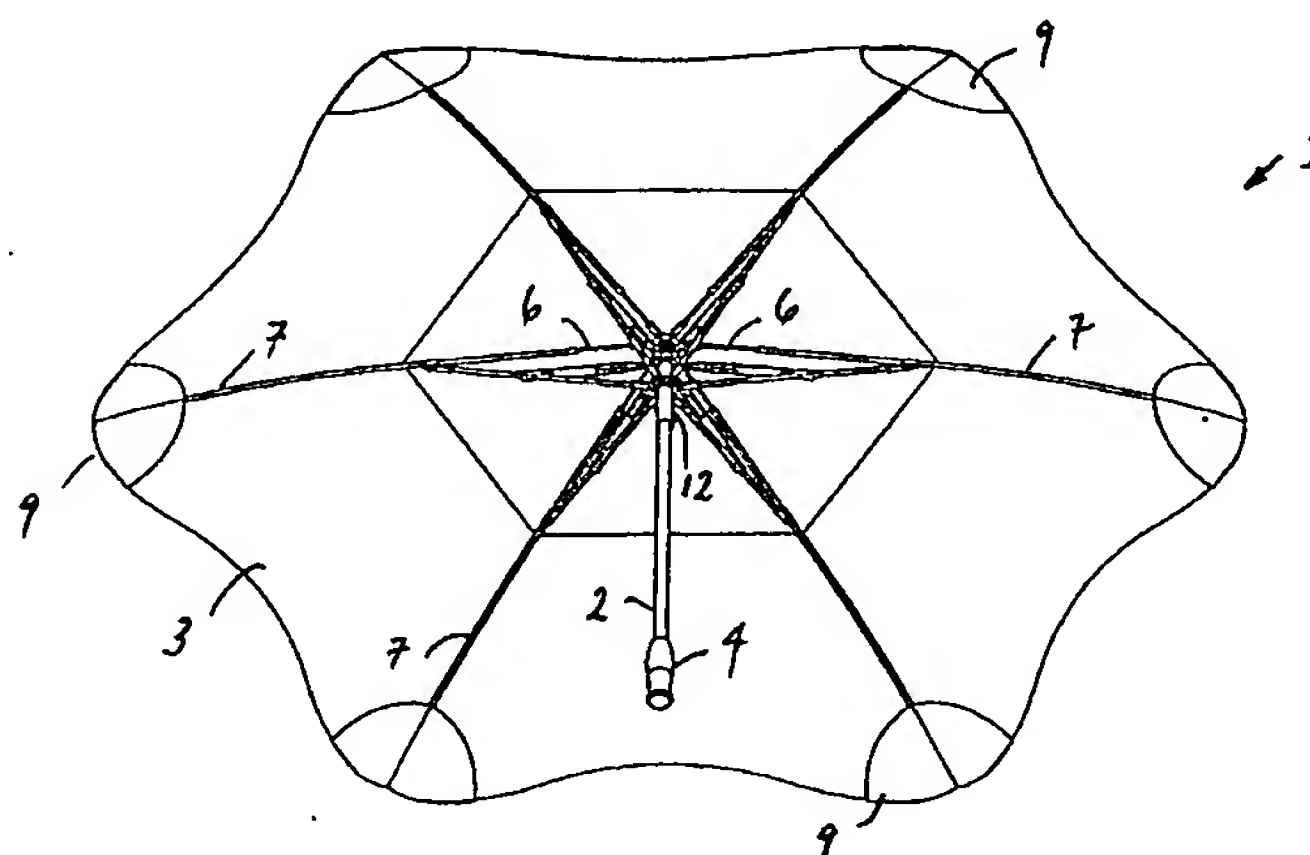
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(54) Title: UMBRELLA



(57) Abstract: An umbrella (1) in which the canopy is supported, tensioned and retained on a frame without any external points. The ends of conventional ribs (6,7) are provided with force spreading components (8) which are located within pockets (9) at the periphery of the umbrella canopy (3). As the umbrella is erected, the force spreading components open to provide a surface which pushes outwardly against a bearing surface formed between a pocket and the canopy, which "spread" outwards. The spreading of the components (8) is initiated by the radially outward movement of slidable tubes (7) upon inner rods (6) attached at their inner ends to the shaft (2) of the umbrella. Inner rods (6) and outer tubes (7) together form the ribs or spokes of the umbrella which are supported and raised/lowered by primary struts (11) connected between the ribs and a primary shaft slider (12). Outward sliding movement of the outer tubes (7) over the inner rods (6) is assisted by secondary struts (13) which connect a secondary shaft slider (14) (positioned between the primary shaft slider (12) and the canopy end of the shaft) and a respective primary strut (11).



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